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DIAGNOSING RACE RELATIONS IN MANAGEMENT**

BY

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^{**}This paper won the 1979 Douglas McGregor Memorial Award for the best article exemplifying the interplay among theory, practice, and values in planned change.

ABSTRACT

This paper reports the theory, process, results, and consequences of diagnosing the race relations among managers of a large industrial corporation. A four person diagnostic team consisting of a black female, black male, white female, and white male, aided by a twelve person advisory committee of similar race/sex composition, developed an organic questionnaire and administered it to more than 600 managers. Data were collected and analyzed on general race relations, management groups, hiring, advancement, firing, actions for change, and reactions to the study. Analysis showed that the state of race relations in the company was related to a variety of systemic conditions including the ideas and feelings of individuals, the perceptions and actions of key groups, and the structure of the whole organization. As a result of the diagnosis management committed itself to an action plan that addressed all the problematic issues uncovered by the diagnosis.

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INTRODUCTION

The United States has had racial problems from its beginnings (Bennett, 1962). In cycles of varying periods, the struggles between black and white people have been ignored and addressed—often by violence, sometimes by law, and more recently by behavioral science. There has been progress, and there has been regression. The patterns of change have been uneven to say the least. Even as this article is being written, the Klu Klux Klan is making national headlines by demonstrating for white rights on the same roads where Martin Luther King, Jr. marched for civil rights 15 years ago (King, 1979). One is reminded of the words offered by Kenneth B. Clark in his testimony before the National Advisory Commission on Civil Disorders:

I read that report . . . of the 1919 riot in Chicago, and it is as if I were reading the report of the investigating committee on the Harlem riot of '35, the report of the investigating committee on the Harlem riot of '43, the report of the McCone Commission on the Watts riot.

I must again in candor say to you members of this Commission—it is a kind of Alice in Wonderland—with the same moving picture re-shown over and over again, the same analysis, the same recommendations, and the same inaction. (Kerner and Lindsay, 1968, p. 29)

Compared to politicians, journalists, lawyers, and the police, behavioral scientists are relatively newcomers to the field of race relations. Sociologists and psychologists began to develop an extensive literature on race relations in the 1930's (Dollard, 1937; Frazier, 1939). The 1940's saw Gunnar Myrdal, a Swedish economist, and a black and white team of American social scientists complete their highly regarded study of race relations in the United States (Myrdal, 1944). The well-known American

<u>Soldier</u> research also conducted during this period included an analysis of black-white relations in the U.S. Military (Stouffer et al, 1949).

More recently Purcell and Cavanagh (1972) and Fernandez (1975) have also reported research on race relations in organizations.

The close of World War II, however, brought a new role for behavioral scientists in race relations. Until this time, the field had aimed primarily at developing greater understanding of racial problems and influencing the formation of public policy. Indeed, Kenneth and Mamie Clark's (1947) research on the self-images of black and white children played an important part in shaping the 1954 Supreme Court decision to end racial segregation in public schools. But the post-World War II era brought a new element-experiential education in group dynamics—to the possible contributions social scientists could make to racial problems.

In the United States during the late 1940's, the NTL Institute was the primary organization to develop and promote this new form of social intervention (Bradford, 1967; Marrow, 1967). The original experiments leading to the founding of NTL were rooted in efforts to improve intergroup relations, especially on the subjects of race and ethnicity. The first workshop devoted to leadership training by experiential methods was held during June 1946 in New Britain, Connecticut for the Connecticut Interracial Commission (Lippitt, 1949).

Continuing to grow both nationwide and worldwide, experiential education in group dynamics has become an increasingly significant force in the broader social science community (Alderfer, 1978). There is now a substantial body of social technology and related theory that can be used to help individuals and groups learn about their own and other group's behavior within the context of racial and other intergroup contexts (Cobbs, 1972; Seashore and Kellner,

1975; Fromkin and Sherwood; 1976; Alderfer, 1977a; Tucker, 1980). But this body of knowledge remains largely unintegrated with the systematic research begun in earlier decades and continued to the present. The time has come, we believe, to begin this integration, and the current study of race relations in management presents an opportunity.

INTERGROUP THEORY AND DIAGNOSIS

Understanding intergroup relations, especially within the context of an organization, is a complex problem whose difficulties are just recently being recognized (Lewicki and Alderfer, 1973; Berg, 1977). Applied behavioral scientists studying groups in conflict enter treacherous territory. Without adequate theory to understand the phenomena they encounter and sophisticated intervention skills to manage the behavior that results, they are likely to become casualties of the conflict. The key concepts used in the present study included: a definition of groups in organizations, and a specific behavioral intervention, called a microcosm group, for understanding and managing the intergroup of the particular situation.

Definition of Groups in Organizations Within the social psychology literature, there is no shortage of definitions of groups but there is also no clear consensus among those who propose definitions (Cartwright and Zander, 1968). Because much of the research leading to these definitions has been done by laboratory social psychologists who deal mainly with the internal properties of groups, the definitions resulting from this work have been comparatively weak in recognizing the external properties of groups. A

review of the literature on groups in organizations, however, produces a definition that gives more balanced attention to internal and external properties.

A human group is a collection of individuals (1) who have significantly interdependent relations with each other, (2) who perceive themselves as a group by reliably distinguishing members from nonmembers, (3) whose group identity is recognized by nonmembers, (4) who have differentiated roles in the group as a function of expectations from themselves, other group members, and nongroup members, and (5) who, as group members acting along or in concert, have significantly interdependent relations with other groups (Alderfer, 1977a, p. 230).

This idea of group begins with individuals who are interdependent, moves to the sense of group as collective that is confirmed from inside and outside the group's boundaries, recognizes that the roles played by members of the group arise from both their internal and external affiliations, and concludes by noting that the group is a significant interacting unit in the social system in which it is embedded. This conceptualization of a group makes every group member into a group representative whenever he or she deals with members of other groups (Rice, 1969).

Intergroups in Organizations Research on integroup relations has identified a number of properties characteristic of intergroup conflict, regardless of the particular groups involved or the specific setting where the relationship occurs (Summer, 1906; Coser, 1956; Sherif and Sherif, 1969; Blake, Shepard, and Mouton, 1964; Levine and Campbell, 1972; Deutsch, 1973). These phenomena include:

a. Power differences. The dimensions of power differences and the degree of discrepancy on each dimension will influence the severity of intergroup conflict.

b. Affective patterns. The severity of intergroup conflict relates to the polarization of feeling among the groups, that is, to the degree that group members split their feelings so that mainly (or solely) positive feelings are associated with their own group and mainly (or solely) negative feelings are projected onto other groups.

c. Cognitive formations, including distortions. As a function of power differences and affective patterns, groups tend to develop their own language (or elements of language), condition their member's perceptions of objective and subjective reality, and transmit sets of propositions—including theories and ideologies—to explain the nature of experiences encountered by members.

d. Leadership behavior. The behavior of group leaders and of members representing a group reflects the power differences, affective patterns, and cognitive formations of their group in relation to other groups. Leadership behavior is both cause and effect of the total pat-

tern of intergroup dynamics in a particular situation.

A theory of intergroups in organizations, however, must go beyond these general properties of intergroup relations and formulate concepts that take account of the particular intergroup's relations (e.g., black and white, labor and management, sales and production) and deal with the broad context in which those relations exist.

Every organization consists of a large number of groups, and every organization member represents a number of these groups in her or his dealings with other people in the organization. The full set of groups in an organization can be divided into two classes: identity groups and organization groups. Members of identity groups share common biological characteristics, participate in equivalent historical experiences, and, as a result, have similar world views. Members of organizational groups are assigned similar primary tasks or share equivalent levels of responsibility. Each person is simultaneously a member of all her or his identity and organization groups. But the group he or she represents at a given moment depends on the particular intergroup context in which he or she is found. The nature and effects of any intergroup relationship can be enhanced or diminished by how a particular situation is structured. The purpose of forming a microcosm group for organizational diagnosis is to create a structure that will allow the nature of a specific intergroup relationship to be observed, while not overlooking the effects of the context in which that relationship is found.

Microcosm Groups A microcosm group is a collection of people whose relationship to one another and to their organization meets the definition of a group given above and whose purpose is to help understand a particular intergroup relationship in that organization. The concept of microcosm group derives directly from the theoretical propositions relating to intergroups in organizations. The first decision in forming a microcosm group is what intergroup relationship is primarily to be studied. Generally the first dimension on which this choice is made is identity versus organization group. If there is a significant power difference among the groups being studied, the number of members from each group should be approximately equal, otherwise the more dominant groups(s) will tend to suppress the information and behavior available from the less dominant group(s). The most learning will be available about the intergroup around which the microcosm group is formed. But if careful attention is given to selecting members to balance representation among other groups as well, then at least cues to the effects of other intergroups will also be available for study. The effects of numbers--and especially numbers in relation to status--applies to the validity of what can be learned about the secondary as well as the primary groups (cf. Kanter, 1977).

Following from the proposition that all individuals are also group representatives, the microcosm group will tend to show the intergroup relations among groups in the organization in the interpersonal relations among its members (Alderfer, 1977a and 1977b). As a general rule, microcosm groups should not be much larger than twelve members, or the effects of size will interfere with the capacity of members to interact with one another on a face-to-face basis. In consulting with microcosm groups, applied behavioral scientists should act to develop and maintain optimally permeable boundaries around both the subgroups and the group as a whole. This means that interventions will be aimed

at increasing-decreasing the permeability of both the subgroup boundaries and the total group boundaries (Alderfer, 1977b). Over time, the microcosm group provides not only a cross-sectional picture of the state of relations among the primary groups under study but also an opportunity to observe how those relations change as a function of events that occur in the organization.

The preceding theory shaped the conceptualization are conduct of the present study. Thus, race relations in management is a problem of intergroup relations in organizations (Alderfer, 1977a). Black and white managerial groups, balanced for equal representation between the sexes, become the primary subgroups around which the microcosm group is formed, and the hierarchical and departmental affiliation of members become secondary, though important, variables in the study.

BACKGROUND AND SETTING

The XYZ Corporation was a predominantly white organization of over 11,000 employees. More than 2,000 of this group were managers, and over 150 of those managers were black. XYZ had a history of progressive actions in race relations. The corporation had taken the lead in its community to recruit and promote competent black managers prior to explicit government pressure to do so. XYZ also had a history of sustained and effective organization development for more than seven years prior to beginning of this project. Judging by the requests for its services and the quality of managers who requested assignments to its work, the 00 department was highly esteemed within the organization.

During the years just prior to the study the company had accelerated its affirmative action commitments, in part in response to government pressure and in part as a continuation of long-standing policies. Affirmative action targets were an element of each manager's objectives, and the management group

as a whole had been successful in reaching its numerical targets. Nevertheless, the director of human resources, who was charged with corporate responsibility for affirmative action, continued to hear comments from both black and white managers that indicated that neither black nor white managers seemed satisfied with the quality of race relations in the company.

The director was well aware of the difference between placing people in positions and having effective work relations. Because of his own background in organization development, he decided to take a diagnostic approach to understand what was happening. He approached the first author, who had a nistory of research and consultation with XYZ, about forming a team to undertake the project. After an extensive discussion, (which included the race (black and white) and sex (female and male) composition of the consulting team, the two agreed to conduct the diagnosis. The first author then proceeded to consult with people about forming the team.

Putting together the team was a most important step in the project; the work was done deliberately and with care. The team was to address one of the most difficult problems in human behavior, and our capacity to confront and work through serious conflict was essential (Alderfer, 1977b). Initially the first author met individually with potential members, and later the groupas-a-whole met to assess and develop its capacity to function effectively under stress. Having completed its own formation, the team returned to negotiations

The men and women on this team with common last names are spouses. In starting up the team we explicitly addressed the implications of this fact first with ourselves and later with the client. With ourselves we wanted to assess the degree to which our marriage and family relationship would impede versus help our consulting work. With the client we were explicit about our relationships, invited him to raise questions about its probable affect on the work, and took the lead in all public meetings to acknowledge this fact to study participants. In general our marital relationships tended to aid more than interfere with our work effectiveness.

with the corporation. This process proceeded easily and resulted in a written contract, which stated that the purpose of the study was to gather information and to prepare a diagnosis of the relationship between black and white managers in the XYZ organization.

METHODS AND PROCEDURES

Data collection on the subject of race relations is by no means a simple matter, if valid information is to be obtained. Earlier research had shown that measurement of racial attitudes is influenced by the race of interviewers and respondents (Hyman, et al., 1954; Schuman and Hatchett, 1974). We acted to apply those findings to data collection with XYZ. But based on the theory described above, we also recognized that in an organizational setting, where the relationships among individuals and groups are much more interdependent than among respondents in a national survey, far more is necessary to develop effective rapport than simply to match the race and sex of respondent and data-collector for the diagnostic study (Alderfer, 1977b). Consequently, the data collection process proceeded in four phases, each designed to correct for possible bias in its own and earlier periods. The phases were: (a) preliminary interviews, (b) advisory group formation, (c) questionnaire development and pre-testing, and (d) questionnaire administration.²

These phases, though clearly specified in writing this article, were not pre-determined at the time of the study, with the exception of the decision to form an advisory committee. Otherwise we took one step at a time and used the learnings from one step to determine the next. We did not, for example, know that a questionnaire would be used until after the preliminary interviews and the advisory group formation.

Preliminary Interviews In total 24 preliminary interviews were conducted by the diagnostic team. Initially people were invited for confidential interviews based upon recommendations by the organization development staff. Consultants asked to meet with black and white people from diverse geographical, departmental, and hierarchical locations whose opinions about race relations represented the range of views in the company. Subsequently these initial respondents nominated other people who were also invited to sessions.

Each preliminary interview was conducted by a male-female pair from the consulting team. The person of the same race and sex of the respondent conducted the interview, and the other consultant took notes. Initially these pairs were bi-racial. After some experience, however, the team determined that information flowed most easily if both interviewer and recorder were of the same race. From this point on all respondents met with both interviewer and recorder of the same race as her or his own.

Interviewees were asked three questions:

- 1. What are your views of black-white relations in XYZ management?
- To whom should I talk to get a view very different from yours?
 - a. Is this person black or white?
 - b. Who are some people (black or white, depending on the answer to 2a) who have views different from yours?
- 3. As a diagnostic team we want to develop an advisory committee. If our report is to cover all important issues and be accepted by all relevant sectors of the organization, who should be a member of this committee?

The consultants conferred frequently during these early sessions. Although we had been unsure whether managers would be inhibited or speak freely in the preliminary interviews, all consultants found respondents most open—often painfully so that the consultants were potently reminded of their racial identity.

Advisory Group Formation The advisory group was designed to be a microcosm of the XYZ management organization balanced primarily in terms of race and sex and secondarily with respect to department, hierarchy, age, and geography; there were three white men, three black men, three black women, and three white women. In total committee represented almost the full range of racial attitudes uncovered in the preliminary interviews. No one was formally invited to be on the committee until he or she had been interviewed and had been agreed to by all members of the consulting team. The primary task of the advisory committee was to provide assistance to the diagnostic team in conducting the study. Specifically the committee:

- Provided insights on the concerns, proclivities, hope and problems of XYZ managers, including on-going information on the corporate climate;
- 2. Helped design a questionnaire;
- 3. Helped contact other XYZ employees to enlist their cooperation; and
- 4. Helped to construct the final report.

In general, the investigators discussed all major issues and plans with the Committee before making decisions and all preliminary reports and findings were checked out with the Committee before dissemination.

There were two basic structures in which the consultants and the advisory group worked together. The first was for the group as a whole to meet with the full consulting team to discuss broad policy and procedure issues relating to the entire study. The second was to divide the group into "like groups" of black females, black males, white females, and white males to review issues where the comfort of being with one's own group seemed important for the work to be done. Over the course of its life, the group tended to work in cycles—first as a whole group and then in subgroups.

Initially the Advisory Committee met as a whole to review the study contract, become acquainted with one another, and question the consultants about the purpose and history of the study. Then the consultants proposed that the group break into "like" subgroups to discuss topics they felt should be included in the study. The subgroups reported their proposals to the total group. These reports provided the consultants with an additional check on the completeness of the topics uncovered by the individual interviews. There was a high degree of agreement between what was learned in the individual interviews and what the subgroups proposed. Because the combination of individual interviews and subgroup discussions produced such rich material, the consultants and the committee felt that it would be possible to go directly to XYZ with a study of their opinions and attitudes by questionnaire.

The questionnaire method used is called an "organic questionniare" by which people are asked to react with degrees of agreement or disagreement (strongly agree to strongly disagree) to statements made by organization members. This method contrasts with more traditional questionnaire approaches, which use the same instrument repeatedly without taking account of specific organizational conditions. The organic questionnaire also provides respondents with a number of open-ended questions that they can answer in their own words An organic questionnaire has the advantage of providing information on the topics and in the language of the organization where it is used. Its major disadvantage is that it must be uniquely designed and analyzed each time it is used (Alderfer and Brown, 1972).

Questionnaire Development and Pretesting Using the data produced in the individual interviews and the material generated in the initial "like groups" discussions, the consultants developed a draft of an organic questionnaire for the Advisory Committee to review. The questionnaire was divided into parts that corresponded with the 8 principal areas of interest:

- 1. General Race Relations
- 2. Managements Groups
- 3. Hiring
- 4. Advancement
- 5. Firing
- 6. Job Opinions
- 7. Actions for Change
- 8. Reactions to this Study

Except for the sections on Job Opinions and Reactions to this Study (24 items out of a total of 187), the entire questionnaire consisted of statements taken from interviews and group discussions.

A section on demographics was also added to permit race, sex, age, department, area, and level comparisons. The Actions for Change Section consisted of two open-ended questions to which respondents were asked to respond in their own words. The rest of the questions asked people to answer by selecting an alternative provided on the questionnaire itself.

The pretesting procedure was to ask all Committee members to complete the draft questionnaire and then spend time in subgroups and in the total group discussing their reactions. Taking the questionnaire was not a comfortable experience for many Committee members. This was the first time the Committee as a whole had fully seen the range of views about race relations that had been expressed by XYZ managers. Moreover, the Committee members were asked to register their own opinions on the questionnaire.

Several members indicated that they did not always like what they found out about themselves as they answered the questions. These reactions were important for understanding the impact of giving the questionnaire to XYZ managers and for developing effective administration procedures. After completing the questionnaire, Advisory Committee members split into "like groups" to discuss their reactions to completing the instrument. Each subgroup then reported to the total group, and the consultants used these reactions to prepare a revised instrument.

At this point, the draft instrument was also given to the director of human resources. He completed the questionnaire and fed his comments and suggestions to the consultants for final revision of the instrument. Although all the comments were thorough and wide-ranging, the task of incorporating the many comments into a new instrument was not difficult because the various individuals and subgroups identified different problems with the draft instrument. The revised version of the questionnaire was then brought before the Advisory Committee as a whole for final comment. Comments were few and mainly pertained to details, with one exception. Committee members (both black and white) thought that the questionnaire was biased to favor black points of view. In drafting the instrument, the consultants had tabulated the origin of particular questions, and were reasonably certain that there were slightly more white (3 or 4) than black items, but the order of the items had not been observed. In the draft, there were substantially more black than white items on the first two pages. The questionnaire was revised a final time to balance the order as well as the number of black and white items.

Questionnaire Administration The questionnaire was administered to XYZ managers at meetings of approximately twenty people per session. All black managers and a 30 percent random sample of white managers were invited to participate. In total 815 XYZ managers were invited to attend questionnaire meetings. Managers were asked to participate in the study by a memorandum from the Manager of Organization Development. Included with that invitation was an additional letter from the president affirming his support for the study.

The first questionnaire session was attended by the top four corporate officers plus the director of human resources and the manager of organization development. This group received the instrument first in order to be sure that they were fully informed in case questions or criticisms should arise as the study progressed. The senior officers received the same introduction and opportunity for questions and critique at the end as was anticipated for other XYZ managers. After completing the questionnaire, they engaged in a wide-ranging discussion of the project and thoroughly endorsed the undertaking. Following their session, all other members of management who would be participants in the study were contacted. These managers received an invitation to participate from the manager of organization development and a letter from the company president endorsing the study two weeks in advance of the questionnaire sessions.

All managers attended sessions with other people of their own gender and race. The external consultants divided themselves among the sessions according to their race and gender. Sessions for white managers were conducted by white consultants and the appropriate white members of the advisory committee. Sessions for black members were conducted by the black consultants without participation from black members of the advisory committee.

This rather elaborate method for administering the questionnaire was the product of lengthy, deliberate, and sometimes conflictful discussions between the consultants and the advisory committee. The primary aim of the administration sessions was to create conditions that would do everything possible to enable managers to report their frank opinions about race relations in XYZ management. The advisory committee and the external consultants both agreed that holding sessions in "like groups" would be the best way to promote frank responses. However, black members of the Advisory Committee believed that frank responses from black managers would be further aided by having only

the black external consultants present at the questionnaire administration, while the white consultants believed that the validity of white responses would be increased if white members of the advisory committee joined the white external consultants in administering the questionnaire to white managers. The adopted procedure for questionnaire administration, which included meetings of "like groups" and differential participation of advisory committee members depending on the race of the managers, was agreed upon by the advisory committee and the external consultants.

In total 676 people completed questionnaires for an 83 percent response rate. No one who directly expressed the desire to avoid participation was pressured to attend the meetings. No one received more than one request to reschedule a session that he or she had missed. The total number of responses to any question is, however, likely to be less because some did not answer each question. People who were not familiar with particular issues were encouraged not to answer questions pertaining to them.

Participation in the questionnaire sessions was not evenly distributed across all race, gender, and level groups. Table I shows the different attendance rates. The two parts of the sample that depart most noticeably from the overall pattern are upper management and the black males. Black males had the highest attendance rate at 94%, and upper management had the lowest at 61%.

There is no way to be certain about the meaning of the lower attendance by upper management. Perhaps it simply reflects the greater demands on their time, although this factor did not prevent full attendance by the top four corporate leaders. Perhaps it reflects the fact that none of their group was a full member of the advisory committee, although the organizational "client" for the study was a member of this group. The most likely explanation, we believe, is that some members of the group perceived the execu-

tion of the study as a serious threat to the well-being of the organization. We base this interpretation on the comments of managers who did attend questionnaire sessions and took the risk of giving their reactions to the study.

(Insert Table 1 about here.)

RESULTS

The methods and procedures described above produced an extensive array of data about race relations in the XYZ Corporation. Most of this information was quantitative and readily analyzed by statistical techniques. One question was qualitative and required content analysis before statistical procedures could be performed. This section describes and interprets these results.

There are four major classes of results. First, factor analyses of the first six sections of the questionnaire were performed separately for black and white managers according to the principle components and varimax procedures. Second, comparisons among the race-sex groups and among other key organizational groups were computed to determine areas of agreement and disagreement among the managers. Third, content analyses of the written answers about prescriptions for change were carried out, and the racial groups were compared. Finally, the race-sex groups were compared in terms of their reactions to the study. ³

³Space limitations prohibit extensive presentation of multivariate statistical analyses. In some cases the results of analyses will be summarized verbally (e.g., the factor analyses). In other cases representative, rather than exhaustive, presentations of the statistical findings will be given (i.e., the group comparisons). Detailed presentation of the multivariate statistical procedures will be the subject of other papers. The results presented here are nearly identical to the ones received by the XYZ managers. Selection and interpretation of these results was heavily influenced by the outcomes of more detailed and sophisticated techniques.

Table 1 Attendance at Questionnaire Sessions by Race, Sex and Job Level

Percent (total number) attending Questionnaire session*

White Males, Lower and Middle Management 84 (337)

White Males, Upper Management 61 (14)

White Females 82 (185)

Black Males 94 (61)

Black Females 80 (79)

TOTAL 83 (676)

^{*}The difference among these five groups are statistically significant from one another at the .01 level by X^2 test.

Structure of Opinions

From the six parts of the questionnaire that were factor analyzed we found three where the factor structure of opinions between black and white managers were similar and three where it was different. Areas where black and white managers showed similar factor structures were hiring, firing and job opinions. Areas where black and white managers showed different factor structure were general race relations, management groups, and advancement.

When the factor structures were different for black and white managers the patterns of items in the factors accounting for the highest percentage of variance were interpretable. White managers tended to group questionnaire items according to properties of individuals (i.e., blacks were pushy, brought low standards, etc.) while black managers tended to correlate characteristics of the <u>organization</u> (i.e., XYZ is racist, biased against blacks, etc.). In reflecting on groups in the organization, white managers tended to combine items pertaining mainly to black groups, while black managers tended to correlate items separately for black and white groups. On the subject of advancement blacks tended to group together items relating to how the XYZ promotional system was structurally biased against blacks, while whites correlated items that indicated how undeserving blacks were receiving accelerated promotions to the detriment of qualified whites. From these findings there is reason to believe that in some key areas black and white managers may hold cognitively different theories to explain what happens in the organizational world in which they live.

Group Comparisons

The factor analysis results provided a basis for organizing group comparisons and selecting particular items and combinations of items for

discussion. Since black and white managers appear to use different theories to explain organizational life, we decided to organize group comparisons in terms of both individual and group effects on race relations within the XYZ organization. The first subsection provides an account of the dynamics of black-white relations primarily from the viewpoint of individual face-to-face relations among managers. The second subsection focuses on the role of various groups within XYZ and their impact on race relations in the company.

Individual perspectives on black-white relations. The relationships among black and white managers at XYZ have both short and long time perspectives. The overall quality of relationships is a day-to-day happening for all black managers and for many white managers. Mobility into and upward within the system takes place over a longer period.

Overall Quality of Black-White Relations Generally white managers had a more favorable view of race relations at XYZ than black managers. Blacks saw more evidence of racism and were more troubled about the quality of race relations than whites. A high proportion of both groups, however, thought that race relations had improved since they joined the company and that race relations could be further improved. Table 2 shows the response patterns to the questionnaire items directly concerned with this topic.

(Insert Table 2 about here)

Table 2^a Overall Quality of Race Relations Among XYZ Managers

Percent Agreement* with Statements for:

	White Males	White Females	Black Males	Black Females
Race relations with XYZ are good.**	89	86	45	55
I am troubled by the quality of relation- ship between black and white managers at XYZ.**	25	23	69	61
Race relations at XYZ have improved since I joined the company.**	85	79	68	63
Race relations among XYZ managers could be improved.**	82	80	98	. 100

^{*}Sum of Strongly Agree, Agree, Mildly Agree

^{**}Differences among groups are statistically significant at .01 level

The items in this and in subsequent tables were selected to be <u>representative</u> of a variety of similar findings from the study. Both the content of the item and the statistics are similar to results from other questions.

Beyond the overall quality of black-white relations, the two groups also differed in their perceptions of specific characteristics of the relationships between the races. Black and white managers generally saw members of both groups as socializing more with their own group than with the other group. In addition each group saw the other group as more closed than its own, although in both cases women were less likely to show this perceptual difference than men. Whites generally tended to perceive the impact of their behavior in relations to blacks more favorably than blacks did. Blacks were more likely to see whites talking about stereo-typed subjects and failing to participate in good one-on-one relationships. Whites also believed that blacks enjoyed racial joking more than they did. Finally, black managers tended to report participating more in discussions about racial issues--with blacks and with whites--than whites did.

The overall pattern is white blindness to racial dynamics as perceived by blacks. Behavioral dynamics add to the set of forces contributing to the conflict between blacks and whites. The findings imply that whites will not learn about their blindness because of the "self-sealing" nature of the behavioral dynamics in which they were enmeshed (Argyris, 1976). The paradox of white behavior in relation to blacks is that as whites believe favorable outcomes are occuring, they are actually maintaining (or enhancing) unfavorable effects. By discussing racial issues less frequently than blacks, whites reduce their opportunities to learn about these dynamics. Table 3 shows the questionnaire answers that document this pattern.

(Insert Table 3 about here)

Mobility Issues in Black-White Relations Mobility dynamics have a predictable series of phases beginning with selection, moving to evaluation, and resulting

Table 3 Characteristics of Relations Between Black and White Managers at XYZ

Percent Agreement* with Statements for: White White **Black** Black Males Females Males | **Females** Whites socialize mainly with other whites regardless of job level.** 82 70 88 80 Blacks socialize mainly with other blacks regardless of job level.** 83 81 76 70 Whites at XYZ discuss mainly stereotyped subjects (e.g., 37 22 66 52 music, sports, etc.) with blacks. Good one-to-one black-white 76 40 59 74 relationships are common in XYZ.** Black managers enjoy participating 24 40 14 25 in racial joking. I talk about race relations with 50 54 71 70 XYZ people who are of a different race than mine.** I have serious conversations about racial issues with XYZ people of 48 47 86 81 my own racial background.**

^{*}Sum of Strongly Agree, Agree, Mildly Agree or Very Often, Often, Sometimes.

^{**} Differences among groups are statistically significant at the .01 level.

in decisions about promotion (or demotion).

On the question of competence there was virtual unanimity among <u>all</u> respondents that both black and white managers should be hired on the basis of ability rather than color. But there were differences between the racial groups in their views of what XYZ actually did in hiring black and white managers. Whites were less likely to believe that black managers were hired on the basis of competence and more likely to believe that they were hired just to fill racial quotas.

A series of parallel items on whether XYZ "screens out assertive confident . . . " managers showed an unexpected pattern of differences among the four race-gender groups. Black women were most certain among all groups in their beliefs that XYZ was screening out assertive confident black men and black women. Black women were also the most certain of all groups that XYZ was screening out assertive confident white men and white women.

Finally, there was a substantial difference between black and white managers in the extent that they believed blacks brought low standards into XYZ. Whites were more likely than blacks to see blacks as bringing low standards into XYZ. Thus, despite the widespread acceptance of competence as the primary criterion on which managers should be selected, blacks and whites differed in their perceptions of the consequences of how XYZ has selected managers.

(Insert Table 4 about here)

Perspectives on evaluating management performance is also an area on which black and white managers have different perceptions. Black managers

Table 4 Hiring Black and White Managers

Percent Agreement* with Statements for: White White **Black** Black Males Females | Males Females Blacks should be hired on the basis of their ability rather 98 99 95 97 than color. Whites should be hired on the basis of their ability rather 98 97 97 99. than color. Black managers are hired on the 64 62 90 76 basis of competence.** Unqualified blacks are hired 51 51 19 just to fill racial quotas.** 33 XYZ screens out assertive 14 22 38 61 confident black males.** XYZ screens out assertive 22 30 22 35 confident white males.** XYZ screens out assertive confident black females.** 12 22 35 59 XYZ screens out assertive 15 26 34 37 confident white females. Blacks have brought low standards into XYZ.** 20 36 3 3

Sum of Strongly Agree, Agree, Mildly Agree

^{**}Differences among groups are statistically significant at the .01 level.

perceived that blacks were frequently given assignments by white managers who could not deal with competent blacks and who had the expectation that they would fail.

On the other hand, few white maragers think that they give blacks assignments with the expectation that they will fail or believe that they cannot deal with competent blacks. But a substantial proportion of white managers and a much higher proportion of black managers believe that if a black fails at a job all blacks suffer in the eyes of management. And virtually all blacks and whites believe that if a white fails at a job, it is an individual issue. A substantial proportion of whites and almost all blacks believe that blacks must work harder than whites to prove themselves. And finally, almost two-thirds of black managers believe that blacks are almost never fairly evaluated by white supervisors, while only a small proportion of white managers entertain this possibility.

From the white perspective there is much less of a problem evaluating black managers than there is from a black point of view. Some whites understand that blacks must work harder to prove themselves, and, as perceived by whites, individual blacks carry responsibility for more than their own failure if they do not do well on a job. Whites miss almost entirely the impression received by blacks that failure is expected and black competence is threatening to whites. Amidst this pattern it is hardly surprising that most blacks do not expect to be evaluated fairly by whites. Table 5 gives the data documenting these assertations.

(Insert Table 5 about here)

Table 5 Evaluation Managerial Performance

Percent Agreement* with Statements for:

	rercent Agreement		With Statements it		<i>,</i> .
	White <u>Males</u>	White Females	Black Males	Black <u>Females</u>	
Black managers are often given assignments with the expectation that they will fail.**	5	8	70	62	
Whites cannot deal with competent blacks.**	9	11	74	80	
If a black fails at a job, all blacks suffer in the eyes of management.**	31	34	79	66	
If a white fails at a job, it is considered an individual issue.	95	92	96	94	
Black people have to work harder than whites to prove themselves.**	35	44	96	97	
Blacks are almost never evaluated fairly by white supervisors.	12	6	60	59	

^{*}Sum of Strongly Agree, Agree, Mildly Agree

^{**}Differences among groups are statistically significant at the .01 level.

In the entire study, there was greatest disagreement between black and white managers on the topic of promotions. Table 6 begins the data presentation on this subject by showing how the different groups receive information about promotions. White managers report sharing relevant career information with black managers at more than twice the rate that black managers report receiving such information from white managers. As an example of one specific type of promotional information, we asked all managers whether they had been told their category on the priority list for promotion. More white than black managers reported receiving this information. In addition, a higher proportion of blacks than whites reported that they had been told that the odds of their being promoted depended on their race. Thus it appears that in general blacks get less career relevant information from whites than whites do, and blacks more often than whites are told that their promotion probabilities depend on their race.

(Insert Table 6 about here)

Table 7 contains the information pertaining to perceptions about promotional advantages. Virtually all blacks and whites believe that the company should be sure individuals are qualified for the jobs they are given. But beyond this consensus, there are very substantial differences in terms of what people believe about how the system works.

Blacks believe that their training is inferior to that received by whites. A high proportion of whites believe that qualified blacks get promoted more rapidly than equally qualified whites, and an even higher proportion of blacks believe that qualified whites are promoted more rapidly than equally qualified blacks. Over 10 times the proportion of whites compared to blacks believe

Table 6 Getting Information About Promotions

Percent Agreement with Statements for: White White B1ack Black Males Males Females Females White managers share vital 89 90 42 41 growth and career related information with black managers.** I have been told my category rating on the stacking list for promotion.** 70 69 62 56 I have been told that the odds 30 21 of my being promoted (whether 18 7 they are high or low) depend on my race.

^{*}Sum of Strongly Agree, Agree, Mildly Agree

Differences among groups are statistically significant at the .01 level.

that blacks get promoted even if they are doing a mediocre job.

The consequences of the current situation indicate difficulties for both groups. A high proportion of whites and a substantial proportion of blacks feel that white males are unjustly penalized by Affirmative Action. Many more whites than blacks believe that reverse discrimination demoralizes XYZ management.

(Insert Table 7 about here)

The special property of mobility is that both groups feel that their own group is at a disadvantage, and that the other group has a clear advantage. Perhaps there is a certain "inevitability" about this because many more people may wish for promotions than receive them. It is very human to account for one's own lack of promotion by a skin color explanation. It may also be easier for supervisors to explain promotion decisions by skin color (a factor over which they have no control) than judged competence (a factor over which they have much control). The subject of promotions is highly conflictful within both racial groups as well as between them. All the natural tensions that are part of any ranking and advancement process are magnified by the existing conflicts between the racial groups. Improving the relationship between black and white managers will reduce the unproductive tensions around mobility, and, conversely, more effective management of the promotional system will improve relations between the races. Understanding the role of key managerial groups at XYZ, the next subject, is essential for changing relations between the races in XYZ management.

Table 7 Who Has Promotion Advantages?

Percent Agreement* with Statement for: White White Black. B1ack Males Females Males Females The company should be sure blacks 100 97 are qualified for the jobs they 99 96 are given. The company should be sure whites are qualified for the jobs they 100 99 96 97 are given. Whites receive proper training 96 95 100 99 for their assignments. Blacks receive proper training 78 97 97 90 for their assignments.** Whites are better training than 1 62 6 65 blacks for assignments. Qualified blacks are promoted 82 77 14 12 more rapidly than equally qualified whites.** Qualified whites are promoted 95 89 9 12 more rapidly than equally qualified blacks. Blacks get promoted even if they 57 55 5 are doing a mediocre job. Reverse discrimination demoralizes 86 78 45 47 XYZ management.** White males are unjustly penalized 20 87 70 31 by Affirmative Action programs.**

^{*}Sum of Strongly Agree, Agree, Mildly Agree or Very Often, Often, Sometimes

^{**}Differences among groups are statistically significant at the .01 level.

Group effects on race relations. In the course of our study we found that there were at least three groups (or types of groups) that exert a major influence on the nature of race relations within XYZ management: top management, the promotion review committees, and the Black Management Association.

Top Management Data on top management attitudes and behavior are quite mixed. Table 8 presents data on the four questionnaire items that explicitly ask about people's views on top management commitments. Most blacks and whites (but proportionately more whites than blacks) believe that top management has a serious commitment to improve race relations at XYZ. But about half of black managers believe that XYZ officers do little to protect the legal rights of black managers, and more than three quarters of black managers believe that XYZ officers do little to advance the cause of black managers. Nearly all white managers and slightly less than half of black managers believe there is a strong commitment among top management toward promoting blacks.

(Insert Table 8 about here)

Analyses by management level further complicates the picture. Based on the results of the factor analyses we developed scales by summing question-naire items that had common factor loadings above .40. These scales were used to conduct more sensitive statistical analyses than were possible using single items. Table 9 shows several scale means varied directly by job level for white male managers. The patterns shown in Table 9 indicate that, on a number of important measures, higher level managers attitudes and perceptions are closer to those of blacks than lower level manager's views. Compared to lower level managers, upper level managers were

Table 8 Perceptions of Top Management Position on Race Relations

Percent Agreement* with statements for:

	White <u>Males</u>	White Females	Black Males	Black Females
Top management at XYZ has a serious commitment to improve race relations.**	84	80	77	72
XYZ officers do little to protect the legal rights of black managers.**	4	5	53	58
XYZ officers do little to advance the cause of black managers.**	8	7	74	81
There is a strong commitment among top management toward promoting blacks.**	91	84	46	38

^{*}Sum of Strongly Agree, Agree, Mildly Agree

Differences among groups are statistically significant at .01 level.

(a) Less likely to think blacks expect or demand too much;

(b) More likely to see XYZ as a racist organization;

(c) More likely to say they have regular discussions on race relations;

(d) Less likely to think XYZ has done enough on race relations;

(e) More likely to think that Affirmative Action programs are helpful;

(f) Less likely to think blacks have a promotion advantage; and

(g) More likely to think whites have a promotion advantage.

Questions may be raised about these trends on two grounds. First, participation in the study was lowest proportionately among higher level managers, and it is reasonable to wonder whether the people who attended the questionnaire sessions were those whose commitment to improved race relations was highest. Second, higher level managers may have felt less free to express their personal views if they differed from the official company position than lower level managers. Higher level managers, afterall, are frequently called upon to represent the company to outside groups and have necessarily put aside their personal views to favor what they believe are the company's best interests. The higher proportion of people staying away from the questionnaire session may actually represent an alternative resolution to this same dilemma. Rather than come to a question-naire session and express views that would either be incongruent with their own personal beliefs or inconsistent with company policy, a substantial proportion of senior managers may have simply stayed away.

(Insert Table 9 about here)

Management Movement Committees Within the XYZ system, the Management Movement Committees play a very important role in determining the vertical and horizontal movement of managers. For this reason the present study in-

Table 9 Comparison Among Levels of White Male Managers in Selected Scales

Mean Values for White Males in Various Job Levels

(and for Black Managers)

Scales_Titles:	Lowe <u>a</u>	r Level	<u>c</u>	Higher <u>d</u>	Level	<u>Blacks</u>
	_			<u>~</u>	<u> </u>	
Blacks expect/demand too much.**	31	29	25	24	22	16
XYZ is a racist organization.**	53	54	54	53	56	85
Have regular discussions of racial issues with own/other races.*	8	8	7	7	9	9
XYZ has not done enough on race relations.	8	8	9	9	10	14
Affirmative Action programs * are fair, helpful, effective.*	11	11	12	13	14	13
Blacks have a promotion advantage.	38	37 .	35	33	28	23
Whites have a promotion advantage.**	15	15	16	17	19	30

^{*}Difference among means significant, p < .05

^{**}Difference among means significant, p < .01

cluded a larger sample of MMC members (selected at random) than other categories of managers who were sampled at random. There were two questions asking explicitly about the MMC system, and a separate analysis was made of the MMC questionnaire responses.

The results shown in Table 10 indicate that there are fairly substantial differences between black and white managers in their views of Management Movement Committees. About three fourths of all blacks managers view the set up of MMC's as making it almost impossible for black managers to reach upper levels of management, while only a small portion of white managers believe this. A substantial proportion of whites (including more women than men) and almost all blacks think that the MMC's view white males as a proven commodity.

(Insert Table 10 about here)

The results shown in Table 10 were supplemented by multiple discriminant analysis. Using the same set of scales described above, the multiple discriminant analysis compared the four race sex groups together with the MMC members in the sample. This analysis produced three statistically significant vectors, which identified how (a) blacks differed from whites; (b) men differed from women; (c) MMC members differed from non-members. MMC members as a subgroup have a view of race relations that was very similar to the perspective of white managers, and especially that of white males. In one sense this is not surprising because 75 of 79 members of our MMC sample were white and 63 of 79 were male. The overall results of this study say that a person's race is clearly the most powerful predictor of the attitudes measured by the questionnaire. But MMC members also had a unique experience in selecting managers for lateral and vertical moves and implementing the

Table 10 Views of Management Movement Committees

Percent Agreement* with Statements for:

	White <u>Males</u>	White Females	Black Males	Black Females
The way Management Movement Committees are set up within XYZ it is almost impossible for blacks to reach upper management levels.**	4	10	73	72
Management Movement Committees view white males as proven commodity.**	26	51	87	88

^{*}Sum of Strongly Agree, Agree, Mildly Agree

^{**}Differences among groups are statistically significant at .01 level.

company's personnel policies. As a consequence, there was reason to believe that the MMC member would have some unique views on the subject of race relations within XYZ management. Multiple discriminant analysis showed there was a vector to support this view. Compared to non-MMC members, MMC members tended to:

(a) believe XYZ was a racist organization;

b) think XYZ has done enough on race;

(c) see blacks and whites socializing separately;

(d) report regular interaction with blacks:

(e) believe evaluations were biased against blacks;

(f) believe a person's promotion did <u>not</u> depend on race or sex;

(g) not think that selection blocked promotions for blacks or whites;

(h) not think whites had an advantage in training or evaluation;

(i) think blacks did have an advantage in promotions; and (j) think whites did not have an advantage in promotions.

This "deeper" analysis of MMC member attitude shows an unusual pattern. In some ways MMC members seem more empathic to black viewpoints. They see racism in XYZ. They report regular interaction with blacks. They believe evaluations are biased against blacks. But in other ways, they seem satisfied with the status quo. They think XYZ has done enough on race. They do not believe whites have a training or evaluation advantage. They think blacks have a promotion advantage and whites do not. MMC members reflect the views of their own race before anything else, but after that they also demonstrate a unique pattern of attitudes attributable to the MMC experience. Both sets of findings indicate that the MMC is at best a very modest force for improved race relations in XYZ management.

Black Management Association Each of the preceding groups within XYZ was either predominantly white or totally white. There were no black managers in upper management. Ninety-five percent of the MMC sample was white, and the major departments and regions were staffed by predominantly white managers.

After all the data presented to this point, it should be difficult, indeed, to doubt that a person's racial background has a strong influence on the nature of his or her experience of race relations. It would appear that white managers in a predominantly white corporation see the world substantially differently than black managers in a predominantly white corporation. The Black Managers Association (BMA) is the only predominantly or totally black organization within XYZ as far as we know. As such BMA was mentioned by many managers during our initial interviews, became a group with which we developed contacts during the study, and also became a topic in the questionnaire. Table 11 presents the management responses to a series of questions related to BMA.

Most blacks and whites see BMA as an organization that helps black managers learn how the XYZ organization operates and how the promotion system works. Most white managers, and slightly fewer black managers, see BMA as an effective support system for black managers. Very few black or white managers see BMA as a radical group whose actions are harmful to XYZ. There is some disagreement among black and white managers as to whether BMA is a "cause" of racial tension and as to whether BMA is a racist organization in terms of member attitudes. White managers are more likely to see BMA as a cause of racial tension and as an organization whose members have racist attitudes than are black managers. The predominant view of BMA, however, as seen by blacks and whites, is that it influences top management to solve racial problems in XYZ.

(Insert Table 11 about here)

Group effects on race relations within XYZ management are potent, and they are complicated. Higher level managers seem to show more empathy for

Table 11 Black Management Association

Percent Agreement* with Statements for:

	White <u>Males</u>	White Females	Black <u>Males</u>	Black Females
BMA helps blacks learn how the XYZ organization operates.	90	93	89	87
BMA helps blacks learn how XYZ's promotion system works.	85	82	81	83
BMA is an effective support system for black managers.**	81	88	73	72
BMA is a racial group of black managers whose actions are generally harmful to XYZ.	8	5	0	7
BMA is a cause of racial tension.**	31	32	18	14
In terms of member attitudes, BMA is essentially a racist organization.	49	44	27	17
BMA works with top management to solve racial problems in XYZ.	79	78	76	70
BMA is an influential organization within XYZ.	64	63	54	57

^{*}Sum of Strongly Agree, Agree, Mildly Agree

^{**}Differences among groups are statistically significant

less willing to deal with the issue of race in XYZ management than lower level managers. The Management Movement Committees reflect predominantly white male attitudes about race relations, but at a deeper level they also show a kind of conflicted understanding of black perspectives that is different than non-PPC members. The BMA represents a respected organization within XYZ. Yet even its images are complex, for on some dimensions BMA is seen more favorably by whites than by blacks (e.g., as a support system for blacks) and on others it is seen less favorably by whites than by blacks (e.g., as a "cause" of racial tension).

Recommendations by XYZ Managers

The largest proportion of the questions on the diagnostic instrument was Likert scale items written to allow people to express their views about the present state of race relations in XYZ. The diagnostic study was also designed to consider change based on the findings. We wanted XYZ managers to give their views about directions for improvement both as a means for additional diagnosis and as a way to explore whether change was appropriate for the system.

Two questions asked XYZ managers for their recommendations were:

- (1) In your opinion, what would be the most effective thing that XYZ could do to improve race relations in XYZ management?
- (2) In your opinion, what would be the worst thing that XYZ could do to improve race relations in XYZ management?

A content analysis procedure was developed to code answers to these questions. One hundred answers were coded independently by two members of the diagnostic team to establish reliability (tau $\beta > .50$) of the most frequently used categories. There were both similarities and differences between blacks and whites in how they answered these questions.

Blacks and whites tended to agree on the following things to do:

- (a) Develop hiring, firing, and advancement policies that were not based on race or sex.
- (b) Provide more complete and honest information about promotions.
- (c) Place blacks in all departments and levels, not just a few.

Blacks and whites tended to agree on the following things not to do:

- (a) Place blacks in jobs for which they were not adequately prepared.
- (b) Mandate improved race relations through top management actions.

Blacks and whites disagreed on whether the following things should be done:4

- (a) Whites thought <u>less</u> enforcement of Affirmative Action was one of the <u>best</u> things that could be done, while blacks thought greater enforcement of Affirmative Action was one of the <u>best</u> things that could be done.
- (b) Blacks thought developing programs to improve race relations was one of the <u>best</u> things XYZ could do while whites thought this would be one of the worst things XYZ could do.
- (c) Blacks thought doing nothing more about race relations was a more severe error than whites. Both groups thought doing nothing was one of the worst things XYZ could do. However, whites tended to favor "gradualism" more than blacks.
- (d) Blacks tended to favor specific intervention in the formal system by disciplining managers for racist acts and by adjusting the MMC process more than whites did.

The analysis of the manager's recommendations indicates areas of agreement and disagreement between blacks and whites. The pattern of disagreement shows whites more conflicted, less decisive, and more hesitant than blacks. Whites' attitudes toward change were consistent with their seeing fewer problems than blacks.

Reactions to the Questionnaire

At the conclusion of the questionnaire, respondents were asked to give their reactions to the study. Table 12 shows the results from these questions for the four race-sex groups. Five of the ten questions had statistically different patterns of answers across the groups. Blacks genrally liked the question-

All differences were statistically significant at the .05 level or less by X^2 test.

naire more than whites. White males were least likely of all groups to think answers would not be held in confidence, and whites were more likely to say that they were completely frank in answering the questions. Women, both black and white, were more likely to say they found the questions difficult. And men, both black and white, were more likely to see the questionnaire as providing them with an opportunity to express their most important opinions about race relations in XYZ management.

These differences among the groups, however, should not obscure the fact that most people in all four groups liked completing the questionnaire, did not think the instrument was biased, were sure that harmful effects would not come from the study, were able to be frank in answering the questions, and did feel their most important opinions were expressed by the questionnaire.

In sum most respondents--black and white--responded favorably to the content of the questionnaire. Few people--black or white--reported fears or the need to censor their responses in taking the questionnaire. Moreover, it was not unusual for respondents to comment that they had learned from answering the questions, for white people to indicate that the learning was not comfortable, and for people of both races to thank the consultants for the opportunity to answer the questions. The care taken in developing and administering the questionnaire seemed to pay off.

(Insert Table 12 about here)

Table 12 Reactions to Questionnaire

Percent Agreement with statements for: White White **Black** Black Males **Females** Males Females | I liked completing the 85 78 88 90 questionnaire' I think that improvements will 69 68 56 62 come as a result of the study This questionnaire is biased 15 7 16 12 I thought my answers might not be held in confidence ** 12 19 13 22 I did not appreciate being asked 14 12 9 8 so many questions I think harmful changes will come 1 . 2 2 1 as a result of the study I was able to be very frank " 96 91 88 83 answering the questions I found it difficult to answer 44 61 33 56 many of the questions The questionnaire provided me with an opportunity to express my most 83 71 81 76 important opinions about race relations in XYZ management** I disliked completing the question-13 16 7 7 naire

^{*}Sum of Strongly Agree, Agree, Mildly Agree

Questions with statistically significant differences across the groups

IMPLICATIONS

The diagnostic procedures described and illustrated here made extensive use of both experiential group methods and traditional social research tools. What were the effects of this approach? The answer to this question has two parts. The first pertains to the nature of the understanding of race relations that this process produced, and the second relates to the kinds of commitments to action that followed from the diagnostic work.

Nature of Understanding

The picture of race relations in the XYZ corporation emerging from this diagnosis was complex. It suggested the possibility that black and white managers conceptualize racial dynamics in fundamentally different ways. Blacks tend to make greater use of group and system concepts and perceive of two groups—blacks and whites. Whites tend to make more use of individual and interpersonal concepts and see one group—blacks. Day—to—day interpersonal relations between blacks and whites were perceived differently by the two racial groups, and the nature of these dynamics was such that without intervention it would be unlikely to change. The different patterns of understanding social causality repeated themselves in the opinions about job training and performance evaluation. On the subject of promotions we found that both groups clearly thought the other had the advantage.

Findings on the group and structural dynamics of race relations in XYZ management were also complex. Top management's support for affirmative action and improved race relations was strongest of any white group in the organization, if their responses are taken at face value. But top management was viewed far more ambivalently by blacks than by whites, and their attendance

rate at the questionnaire sessions was the lowest of any group. The structure and process of the Management Movement Committees was seen less favorably by blacks than by whites. This general view was confirmed by an overall comparison of MCC opinions with black's views, but it also turned out that beneath their predominantly white opinions, MCC members also showed more empathy for black perspectives than non-MCC members. The Black Management Association was viewed favorably by blacks and whites, but a unique pattern of ambivalence emerged here, too. Whites tended to see the organization as stronger and more threatening than blacks, and blacks tended to see it as more benevolent than whites.

The diagnosis showed that race relations in XYZ management could only be understood from a fully systemic perspective. Affective and cognitive states from individuals and groups were set in motion and maintained over time by a pattern of events that was self-sustaining. If the diagnosis was correct, then any intervention that was to be more than marginally effective also had to be designed from a total system perspective.

Commitments to Action

When the contract for the diagnosis was being written we alerted the client that taking such a direct approach to race relations in a predominantly white corporation would probably prove substantially more difficult than other OD work he knew. We anticipated at some point that the full force of white resistance would be experienced. To handle these dynamics competently, if they occurred, the consulting team and the advisory committee were developed with great care. For a long time it appeared that this prediction was to be wrong; the work proceeded smoothly with about the same degree of anxiety and conflict as any other serious social intervention.

But we eventually encountered resistance from the XYZ legal department. The legal department expressed concern that our findings could be utilized as supporting data for future EEO legal actions against the organization. Initially we responded positively to these concerns, and re-wrote portions of the report to increase clarity and to state explicitly that our work was based upon attitudes and opinions rather than upon verified fact. When it became clear that this would not satisfy the lawyers, we had no choice but to resist their demands for substantive changes. We believed those changes would compromise the accuracy and integrity of the study. We feared that no acceptable compromise could be reached between their perceived need for legal protection and our felt commitment to accuracy and integrity. Fortunately senior management opted to support our point of view and reaffirmed their public and private support of our work. The discussion process (including both rewriting and the dispute) caused an eight month delay in completing the project.

Commitment from senior management to a fully systemic intervention followed after the diagnosis. A detailed action plan was prepared by the director of human resources and presented to the entire management organization, starting with the Board of Directors. The plan was evolved by the director consulting with the diagnostic team, with senior management, and with the Black Management Association. Included in the plan were elements that responded to all elements of the diagnosis and proposed work with individuals and groups at all levels of the management system. It included commitments to: (1) continue the advisory committee, (2) recruit and place more blacks in key parts of the system such as the MMC (3) initiate interventions with important structural units such as top management and the organization development unit, (4) design new management training programs in order to teach whites and blacks more about racial dynamics and (5) write proposals to revise key elements of the management

ment personnel system, such as performance appraisal and the affirmative action program. The plan was indeed systemic in nature. The diagnostic process, by taking account of both black and white perspectives and working through the organizational context, offers a way to break through the self-sealing cycle. It will, of course, take time to determine how well the program works. But there was little doubt in our minds that XYZ had made a commitment to organization wide change and that the sophistication of the action plan matched the complexity of the problems revealed by the diagnosis.

The effects of combining experiential group dynamic methods with the traditional tools of social research came to fruition. Our theory of intergroup relations and organizational diagnosis proved useful. We were fortunate to participate in such an experience. The results of the forthcoming intervention program will provide additional opportunities to gain understanding of race relations dynamics within predominantly white organizations.

REFERENCES

- Alderfer, Clayton P., Group and intergroup relations, In Hackman, J.R. and Suttle, J.L. (eds.), <u>Improving Life at Work</u>, Santa Monica: Goodyear, 1977a, pp. 227-296.
- Alderfer, Clayton P., Improving organizational communication through longterm intergroup intervention, <u>Journal of Applied Behavioral Science</u>, 1977b, <u>13</u>, 193-210.
- Alderfer, Clayton P., Reflections on these advances in experiential social processes; In Cooper, C.L. and Alderfer, C.P. (eds.), Advances in Experiential Social Processes, Vol. 1, New York: Wiley, 1978, pp. 217-221.
- Alderfer, Clayton P. and Brown, L. Dave, Designing an empathic questionnaire for organizational research, <u>Journal of Applied Psychology</u>, 1972, <u>56</u>, 456-460.
- Argyris, Chris, Increasing Leadership Effectiveness, New York: Wiley, 1976.
- Bennett, L., Jr., <u>Before the Mayflower: A History of the Negro in America</u>. Baltimore: Penguin, 1962.
- Berg, David N., Failure at entry, In Miruis, P. and Berg, D.N. (eds.), Failures in Organization Development and Change. New York: Wiley, 1977, pp. 33-56.
- Blake, R.R., Shepard, H.A., and Mouton, J.S., <u>Managing Intergroup Conflict in Industry</u>. Houston: Gulf Publishing, 1964.
- Bradford, Leland P., Biography of an institution, <u>Journal of Applied Behavioral</u> <u>Science</u>, 1967, <u>3</u>, 127-143.
- Cartwright, D. and Zander, A., <u>Group Dynamics</u>, 3rd Edition. New York: Harper & Row, 1968.
- Clark, K.B. and Clark, M., Racial identification and preference in Negro children, In Newcomb, T.M. and Hartley, E.L. (eds.), Readings in Social Psychology, first edition, New York: Holt, 1947.
- Cobbs, P.M., Ethnotherapy in groups, In L.N. Solomon and B. Berzon (eds.),
 New Perspectives on Encounter Groups. San Francisco: Jossey-Bass, 1972.
- Coser, L.A., The Functions of Social Conflic. Glencoe: Free Press, 1956.
- Deutsch, M., The Resolution of Conflict, New Haven: Yale, 1973.
- Dollard, J., <u>Caste and Class in a Southern Town</u>. New Haven: Yale University Press, 1937.

- Fernandez, J.P., Black Managers in White Corporations. New York: Wiley, 1975.
- Frazier, E.F., The Negro Family in the United States. Chicago: University of Chicago Press, 1939.
- Franklin, H. and Sherwood, J. (eds.), <u>Intergroup and Minority Relations:</u>
 An Experiential Handbook. LaJolla: University Associates, 1976.
- Hyman, H., Cobb, W.J., Feldman, J.J., Hart, C.W. and Stember, C.H., <u>Interviewing in Social Research</u>. Chicago; University of Chicago Press, 1954.
- Kanter, R.M., Men and Women of the Corporation. New York: Basic Books, 1977.
- Kerner, O. and Lindsay, J., Report of the National Advisory Commission on Civil Disorders. New York: E.P. Dutton, 1968.
- King, W., Klansmen begin white-rights march in Alabama, New York Times, Friday, August 10, 1979, p. A9.
- Levine, R.A. and Campbell, D.T., Ethnocentrism. New York: Wiley, 1972.
- Lewicki, R.J. and Alderfer, C.P., The tensions between research and intervention in intergroup conflict, <u>Journal of Applied Behavioral Science</u>, 1973, 9, 424-449.
- Lippitt, R., <u>Training in Community Relations</u>. New York: Harper and Bros., 1949.
- Marrow, A., Events leading to the establishment of NTL, <u>Journal of Applied</u>
 <u>Behavioral Science</u>, 1967, <u>3</u>, 144-150.
- Myrdal, G., An American Dilemma: The Negro Problem and Modern Democracy.
 New York: Harper, 1944.
- Purcell, T.V. and Cavanagh, G.F., <u>Blacks in the Industrial World</u>. New York: Free Press, 1972.
- Rice, A.K.; Individual, group, and intergroup processes, <u>Human Relations</u>, 1969, 22, 565-584.
- Seashore, E. and Kellner, H., Personal communication, 1975.
- Schuman, H. and Hatchett, <u>Black Racial Attitudes: Trends and Complexities</u>.

 Ann Arbor, Michigan: Survey Research Center, 1974.
- Sherif, M. and Sherif, C.; Social Psychology. New York: Harper & Row, 1969.
- Stouffer, S.A., Suchman, E.A., DeVinney, L.C., Star, S.A. and Williams, R.M., Jr., <u>The American Soldier</u>, New York: Wiley, 1949.

(References continued)

Sumner, W.G., Folkways. New York: Ginn, 1906.

Tucker, R.C., Planning for black human interaction groups, In Alderfer, C.P. and Cooper, C.L. (eds.), <u>Advances in Experiential Social Processes</u>, Vol. 2, New York: Wiley, 1980.

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